

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 10337734  
PUBLICATION DATE : 22-12-98

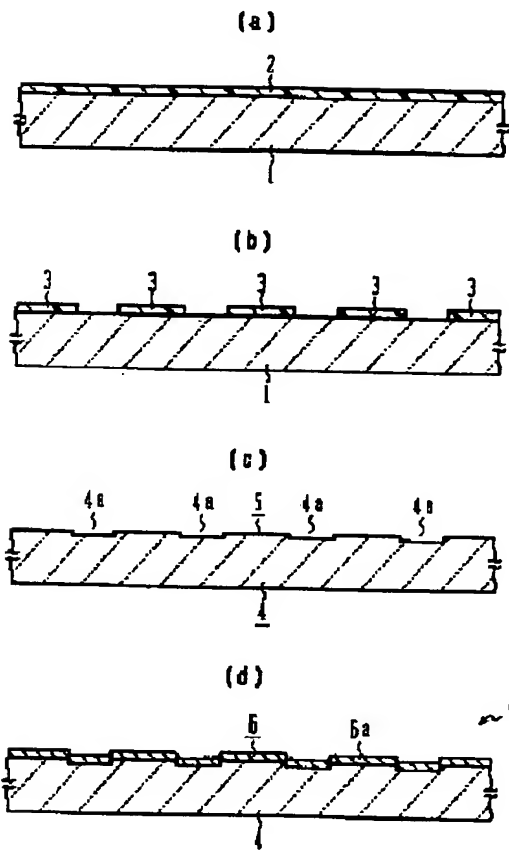
APPLICATION DATE : 06-06-97  
APPLICATION NUMBER : 09149214

APPLICANT : HOYA CORP;

INVENTOR : YOKOO YOSHIATSU;

INT.CL. : B29C 33/38 C03B 11/00 C03B 40/00 //  
C04B 35/52 C23F 4/00

TITLE : MOLD AND ITS MANUFACTURE



ABSTRACT : PROBLEM TO BE SOLVED: To obtain high accuracy and long lifetime of a transfer pattern of a necessary desired shape by providing a base material having a transfer molding surface of a predetermined shape formed by dry etching, and a release film formed on the material, and forming a surface of the film as a transfer molding surface.

SOLUTION: A mold material 1 made of superhard raw material containing tungsten carbide is prepared. This one surface is coated with positive photoresist by a spin-coating method to form a resist film 2. A photomask of a predetermined shape is brought into close contact with an upper surface of the film, emitted with ultraviolet ray to form a resist pattern 3. After it is postbaked, with the patterns 3 as masks the one surface of the material is dry etched. The pattern 3 is released by using releasing liquid to form a base material 4. Here, a side formed with grooves 4a becomes a transfer molding elementary surface 5, and a release film 6 is formed on the surface by using an RF sputtering unit.

COPYRIGHT: (C)1998,JPO